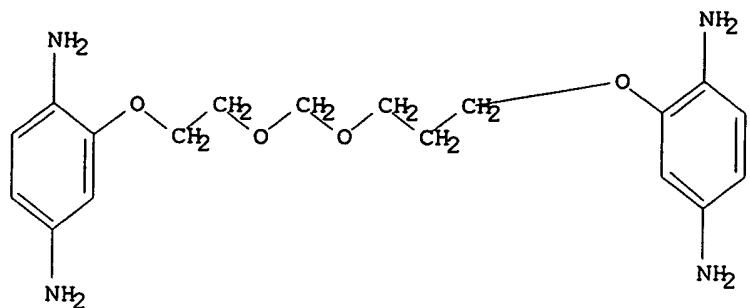


FILE 'REGISTRY' ENTERED AT 16:11:58 ON 10 JAN 2001
L1 STRUCTURE uploaded
L2 1 SEA SSS FUL L1
L*** DEL 0 S L1
D L1

FILE 'CAPLUS' ENTERED AT 16:13:04 ON 10 JAN 2001
L3 26 SEA L2
L4 1495228 SEA DYE? OR COLOR? OR COLOUR? OR TINT? OR CHROM?
L5 26 SEA L3 AND L4
D IBIB ABS HIT 1-26
D IBIB ABS HITSTR 1-26

=> d 11

L1 HAS NO ANSWERS
L1 STR

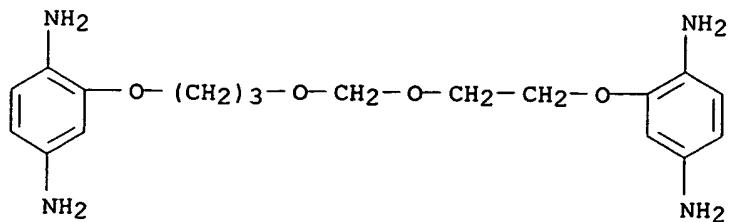


Structure attributes must be viewed using STN Express query preparation.

L5 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:244549 CAPLUS
 DOCUMENT NUMBER: 130:286801
 TITLE: Oxidative hair **dye** compositions containing
 oxidoreductase-type enzymes, oxidation bases, and
 coupling agents
 INVENTOR(S): De La Mettrie, Roland; Cotteret, Jean; De Labbey,
 Arnaud; Maubru, Mireille
 L'Oreal, Fr.
 PATENT ASSIGNEE(S):
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917733	A1	19990415	WO 1998-FR2078	19980928
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,				
TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769210	A1	19990409	FR 1997-12350	19971003
FR 2769210	B1	20000211		
AU 9893542	A1	19990427	AU 1998-93542	19980928
EP 969799	A1	20000112	EP 1998-946519	19980928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9806218	A	20000418	BR 1998-6218	19980928
JP 2000507990	T2	20000627	JP 1999-521120	19980928
NO 9902649	A	19990730	NO 1999-2649	19990601
PRIORITY APPLN. INFO.:			FR 1997-12350	19971003
			WO 1998-FR2078	19980928

OTHER SOURCE(S): MARPAT 130:286801
 AB A ready-to-use oxidn. **dyeing** compn. for keratin fibers, and in
 particular for human keratin fibers such as hair comprise, in a medium
 appropriate for **dyeing**, at least an oxidn. base, at least a
 substituted meta-phenylenediamine as first coupling agent, and at least a
 second coupling agent selected among meta-aminophenols and
 meta-diphenols,
 and at least an oxidoreductase-type enzyme with 2 electrons in the
 presence of at least a donor for said enzyme. A hair **dye** compn.
 contained para-phenylenediamine 0.216, (2,4-diamino-1-.beta.-
 hydroxyethoxy)benzene.2HCl 0.048, 1,3-dihydroxybenzene 0.198, uricase
 (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.
 IT 221110-58-3
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair **dye** compns. contg. oxidoreductase-type
 enzymes, oxidn. bases, and coupling agents)
 RN 221110-58-3 CAPLUS
 CN 1,4-Benzenediamine, 2-[3-[[2-(2,5-diaminophenoxy)ethoxy]methoxy]propoxy]-



REFERENCE COUNT:

3

REFERENCE(S):

- (1) Tsujino, Y; US 4961925 A 1990 CAPLUS
- (2) Wella Ag; EP 0795313 A 1997 CAPLUS
- (3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 CAPLUS

L5 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:244547 CAPLUS
 DOCUMENT NUMBER: 130:286799
 TITLE: Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and oxidation bases
 INVENTOR(S): Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917731	A1	19990415	WO 1998-FR2076	19980928
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769214	A1	19990409	FR 1997-12354	19971003
FR 2769214	B1	19991217		
AU 9893540	A1	19990427	AU 1998-93540	19980928
BR 9806175	A	19991019	BR 1998-6175	19980928
EP 998260	A1	20000510	EP 1998-946517	19980928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000507988	T2	20000627	JP 1999-521118	19980928
NO 9902647	A	19990730	NO 1999-2647	19990601
PRIORITY APPLN. INFO.:			FR 1997-12354	19971003
			WO 1998-FR2076	19980928

OTHER SOURCE(S): MARPAT 130:286799

AB A ready-to-use oxidn. dyeing compn. for keratin fibers, and in particular for human keratin fibers such as hair comprise, in a medium appropriate for dyeing, at least an oxidn. base, 2-amino-3-hydroxy pyridine (I) as coupling agent, and at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.30, I 0.30, excipients and

water q.s. 100 g.

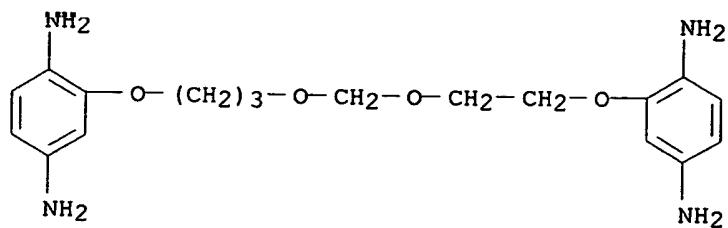
IT 221110-58-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. contg. oxidoreductase-type enzymes and oxidn. bases)

RN 221110-58-3 CAPLUS

CN 1,4-Benzenediamine, 2-[3-[[2-(2,5-diaminophenoxy)ethoxy]methoxy]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

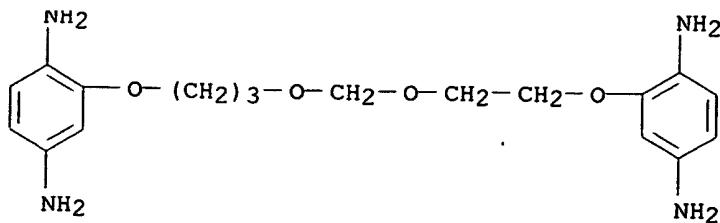
REFERENCE(S) :

- (1) Kaisha, Y; EP 0716846 A 1996 CAPLUS
- (2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 CAPLUS
- (3) L'Oreal; EP 0766958 A 1997 CAPLUS
- (4) Procter & Gamble; WO 9724105 A 1997 CAPLUS

L5 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:244546 CAPLUS
 DOCUMENT NUMBER: 130:301479
 TITLE: Oxidative hair **dye** compositions containing
 oxidoreductase-type enzymes, oxidation bases, and
 direct cationic **dyes**
 INVENTOR(S): De La Mettrie, Roland; Cotteret, Jean; De Labbey,
 Arnaud; Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int'l. Appl., 83 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917730	A1	19990415	WO 1998-FR2075	19980928 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,				
TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769213	A1	19990409	FR 1997-12353	19971003
FR 2769213	B1	19991217		
AU 9893539	A1	19990427	AU 1998-93539	19980928
EP 969798	A1	20000112	EP 1998-946516	19980928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9806205	A	20000215	BR 1998-6205	19980928
JP 2000507987	T2	20000627	JP 1999-521117	19980928
NO 9902646	A	19990712	NO 1999-2646	19990601
PRIORITY APPLN. INFO.:			FR 1997-12353	19971003
			WO 1998-FR2075	19980928

OTHER SOURCE(S): MARPAT 130:301479
 AB A ready-to-use oxidn. **dyeing** compn. for keratin fibers, and in
 particular for human keratin fibers such as hair comprise, in a medium
 appropriate for **dyeing** at least an oxidn. base, at least a
 direct cationic **dye**, and at least an oxidoreductase-type enzyme
 with 2 electrons in the presence of at least a donor for said enzyme. A
 hair **dye** compn. contained para-phenylenediamine 0.7,
 2-(4-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.6, uricase
 (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.
 IT 221110-58-3
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (oxidative hair **dye** compns. contg. oxidoreductase-type
 enzymes, oxidn. bases, and direct cationic **dyes**)
 RN 221110-58-3 CAPLUS
 CN 1,4-Benzenediamine, 2-[3-[(2-(2,5-diaminophenoxy)ethoxy)methoxy]propoxy]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT:

3

REFERENCE(S):

- (1) Kaisha, Y; EP 0716846 A 1996 CAPLUS
- (2) Kyowa Hakko Kogyo Kk; EP 0310675 A 1989 CAPLUS
- (3) Oreal; WO 9400100 A 1994 CAPLUS

L5 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:244545 CAPLUS
 DOCUMENT NUMBER: 130:286798
 TITLE: Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and oxidation bases
 INVENTOR(S): De La Mettrie, Roland; Cotteret, Jean; De Labbey,
 Arnaud; Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917729	A1	19990415	WO 1998-FR2074	19980928 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ; VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,				
TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769211	A1	19990409	FR 1997-12351	19971003
FR 2769211	B1	19991224		
AU 9893538	A1	19990427	AU 1998-93538	19980928
BR 9806206	A	20000418	BR 1998-6206	19980928
EP 998259	A1	20000510	EP 1998-946515	19980928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 20000507986	T2	20000627	JP 1999-521116	19980928
NO 9902645	A	19990730	NO 1999-2645	19990601
PRIORITY APPLN. INFO.:			FR 1997-12351	19971003
			WO 1998-FR2074	19980928

OTHER SOURCE(S): MARPAT 130:286798

AB A ready-to-use oxidn. dyeing compn. for keratin fibers, and in
 particular human keratin fibers such as hair comprise, in a medium
 appropriate for dyeing, at least an oxidn. base selected among
 para-phenylenediamine derivs., double bases, ortho-aminophenols and
 heterocyclic bases, at least a second oxidn. base selected among
 para-aminophenols, at least a meta-aminophenol as coupling agent, and at
 least an oxidoreductase-type enzyme with 2 electrons in the presence of
 at least a donor for said enzyme. A hair dye compn. contained
 uricase (20 IU/mg) 1.5, uric acid 1.5, 2-.beta.-hydroxyethyl-p-
 phenylenediamine.2HCl 0.45, p-aminophenol 0.1, excipients and water q.s.
 100 g.

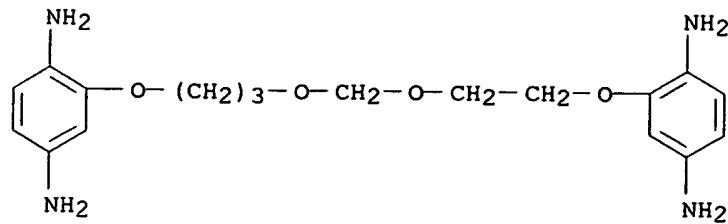
IT 22110-58-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. contg. oxidoreductase-type
 enzymes and oxidn. bases)

RN 22110-58-3 CAPLUS

CN 1,4-Benzenediamine, 2-[3-[(2-(2,5-diaminophenoxy)ethoxy)methoxy]propoxy]-



REFERENCE COUNT:

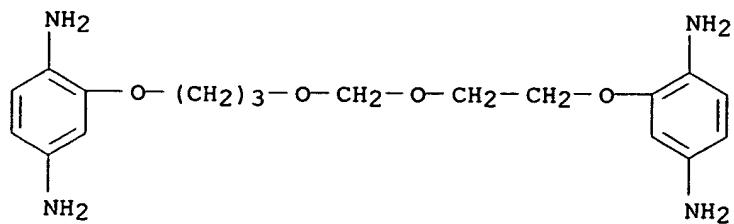
3

REFERENCE(S):

- (1) Tsujino, Y; US 4961925 A 1990 CAPLUS
- (2) Wella Ag; EP 0795313 A 1997 CAPLUS
- (3) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 CAPLUS

L5 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:244544 CAPLUS
 DOCUMENT NUMBER: 130:286797
 TITLE: Oxidative hair dye compositions containing
 oxidoreductase-type enzymes and glycols
 INVENTOR(S): Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 36 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917728	A1	19990415	WO 1998-FR2073	19980928 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769215	A1	19990409	FR 1997-12355	19971003
FR 2769215	B1	19991224		
AU 9893537	A1	19990427	AU 1998-93537	19980928
BR 9806172	A	19991019	BR 1998-6172	19980928
EP 998258	A1	20000510	EP 1998-946514	19980928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000507985	T2	20000627	JP 1999-521115	19980928
NO 9902644	A	19990628	NO 1999-2644	19990601
PRIORITY APPLN. INFO.:			FR 1997-12355	19971003
			WO 1998-FR2073	19980928
OTHER SOURCE(S): MARPAT 130:286797				
AB	A ready-to-use oxidn. dyeing compn. for keratin fibers, and in particular human keratin fibers such as hair comprise, in an appropriate medium for dyeing, at least an oxidn. base, at least a C2 glycol C4-8 ether and/or a C3-9 glycol C1-8 ether and at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair dye compn. contained uricase (20 IU/mg) 1.5, uric acid 1.5, p-phenylenediamine 0.324, 1,3-dihydroxybenzene 0.33, propylene glycol monomethyl ether 20.0, hydroxyethyl cellulose 1.0, Oramix CG110 8.0, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g.			
IT	221110-58-3			
RL	BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)			
	(oxidative hair dye compns. contg. oxidoreductase-type enzymes and glycols)			
RN	221110-58-3 CAPLUS			
CN	1,4-Benzenediamine, 2-[3-[(2-(2,5-diaminophenoxy)ethoxy)methoxy]propoxy]-(9CI) (CA INDEX NAME)			



REFERENCE COUNT:

4

REFERENCE(S) :

- (1) Kyowa Hakko K K K; EP 0310675 A 1989 CAPLUS
- (2) Tsujino, Y; US 4961925 A 1990 CAPLUS
- (3) Wella Ag; EP 0795313 A 1997 CAPLUS
- (4) Yamahatsu Sangyo K Ltd; EP 0716846 A 1996 CAPLUS

LS ANSWER 22 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:222844 CAPLUS
 DOCUMENT NUMBER: 130:271860
 TITLE: Oxidative hair **dye** compositions comprising
 choline oxidase
 INVENTOR(S): Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 34 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915140	A1	19990401	WO 1998-FR1796	19980811 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2768618	A1	19990326	FR 1997-11823	19970923
FR 2768618	B1	19991022		
AU 9890755	A1	19990412	AU 1998-90755	19980811
EP 966253	A1	19991229	EP 1998-942731	19980811
R: DE, ES, FR, GB, IT				
JP 2000506549	T2	20000530	JP 1999-518626	19980811
US 6099590	A	20000808	US 1999-308579	19990521
PRIORITY APPLN. INFO.:			FR 1997-11823	19970923
			WO 1998-FR1796	19980811

OTHER SOURCE(S): MARPAT 130:271860

AB A ready-to-use oxidn. **dyeing** compn. for **dyeing** keratin
fibers, and particularly human keratin fibers such as hair comprise, in
an

appropriate medium for **dyeing**, at least an oxidn. base, choline
oxidase (I), and at least a substrate for I. A hair **dye** compn.
contained para-phenylenediamine 0.216, 2,4-diaminophenoxyethanol
dihydrochloride 0.723, I (18 IU/mg) 1.111, choline hydrochloride 0.166,
ethanol 10.0, monoethanolamine q.s. pH = 9.5, and water q.s. 100 g. The
compn. was applied on a 90% white hair for 30 min, then washed and dried
to obtain the desired **color**.

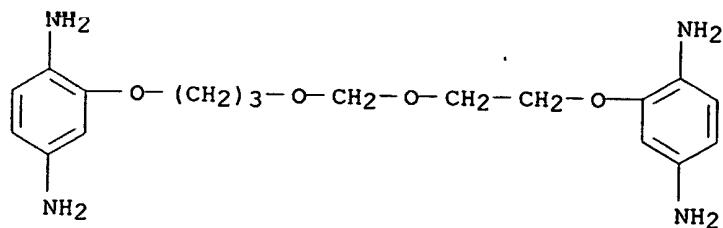
IT 221110-58-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(oxidative hair **dye** compns. comprising choline oxidase)

RN 221110-58-3 CAPLUS

CN 1,4-Benzenediamine, 2-[3-[[2-(2,5-diaminophenoxy)ethoxy]methoxy]propoxy]-
(9CI) (CA INDEX NAME)



REFERENCE COUNT:

2

REFERENCE(S) :

- (1) Wella Ag; EP 0795313 A 1997 CAPLUS
- (2) Yamahatsu Sangyo Kaisha Ltd; EP 0716846 A 1996 CAPLUS

L5 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:222843 CAPLUS
 DOCUMENT NUMBER: 130:271859
 TITLE: Oxidative hair **dye** compositions comprising
 sarcosine oxidase
 INVENTOR(S): Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915139	A1	19990401	WO 1998-FR1795	19980811 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2768619	A1	19990326	FR 1997-11824	19970923
FR 2768619	B1	19991022		
AU 9890754	A1	19990412	AU 1998-90754	19980811
EP 969796	A1	20000112	EP 1998-942730	19980811
R: DE, ES, FR, GB, IT				
JP 2000506548	T2	20000530	JP 1999-518625	19980811
US 6090159	A	20000718	US 1999-308598	19990521
PRIORITY APPLN. INFO.:			FR 1997-11824	19970923
			WO 1998-FR1795	19980811

OTHER SOURCE(S): MARPAT 130:271859

AB A ready-to-use oxidn. **dyeing** compn. for **dyeing** keratin
 fibers, and particularly human keratin fibers such as hair comprise, in
 an

appropriate medium for **dyeing**, at least an oxidn. base,
 sarcosine oxidase (I), and at least a substrate for I. A hair **dye**
 compn. contained para-phenylenediamine 0.108, 2,4-diaminophenoxyethanol
 dihydrochloride 0.241, I (45 IU/mg) 0.444, sarcosine 0.445, ethanol 10.0,
 monoethanolamine q.s. pH = 9.5, and water q.s. 100 g. The compn. was
 applied on a 90% white hair for 30 min, then washed and dried to obtain
 the desired **color**.

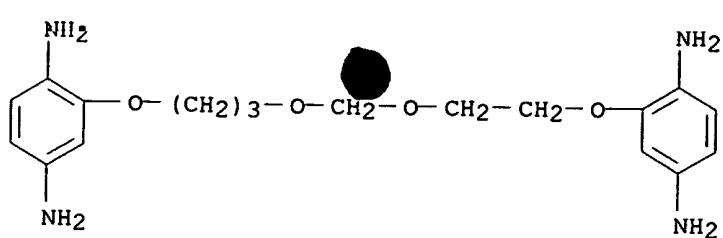
IT 22110-58-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair **dye** compns. comprising sarcosine oxidase)

RN 22110-58-3 CAPLUS

CN 1,4-Benzenediamine, 2-[3-[[2-(2,5-diaminophenoxy)ethoxy]methoxy]propoxy]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT:

2

REFERENCE(S) :

- (1) Wella Ag; EP 0795313 A 1997 CAPLUS
- (2) Yamahatsu Sangyo Kaisha Ltd; EP 0716846 A 1996 CAPLUS

L5 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:222842 CAPLUS
 DOCUMENT NUMBER: 130:271858
 TITLE: Oxidative hair dye compositions comprising
 bilirubin oxidase
 INVENTOR(S): Maubru, Mireille
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: PCT Int. Appl., 34 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915138	A1	19990401	WO 1998-FR1794	19980811 ✓
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2768617	A1	19990326	FR 1997-11822	19970923
FR 2768617	B1	19991022		
AU 9890753	A1	19990412	AU 1998-90753	19980811
EP 967964	A1	20000105	EP 1998-942729	19980811
R: DE, ES, FR, GB, IT				
JP 2000516264	T2	20001205	JP 1999-518624	19980811
US 6152967	A	20001128	US 1999-308708	19990521
PRIORITY APPLN. INFO.:				
			FR 1997-11822	19970923
			WO 1998-FR1794	19980811

OTHER SOURCE(S): MARPAT 130:271858

AB A ready-to-use oxidn. dyeing compn. for dyeing keratin
 fibers, and particularly human keratin fibers such as hair comprise, in
 an

appropriate medium for dyeing, at least an oxidn. base,
 bilirubin oxidase (I), and at least a substrate for I. A hair dye
 compn. contained para-phenylenediamine 0.108, 2,4-diaminophenoxyethanol
 dihydrochloride 0.241, I (38 IU/mg) 1.526, bilirubin 2.92, ethanol 10.0,
 monoethanolamine q.s. pH = 9.5, and water q.s. 100 g. The compn. was
 applied on a 90% white hair for 30 min, then washed and dried to obtain
 the desired color.

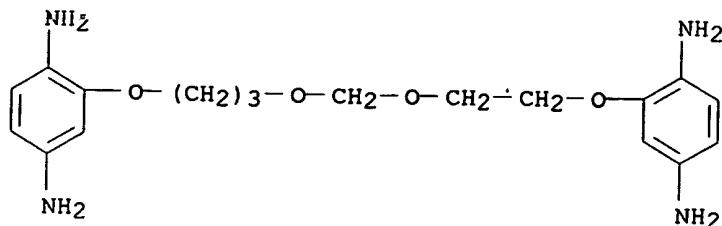
IT 221110-58-3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(oxidative hair dye compns. comprising bilirubin oxidase)

RN 221110-58-3 CAPLUS

CN 1,4-Benzenediamine, 2-[3-[(2-(2,5-diaminophenoxy)ethoxy)methoxy]propoxy]-
 (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

REFERENCE(S):

9723685

(1) Novo Nordisk AS; WO 9501426 A 1995 CAPLUS

(2) Novo Nordisk Biochem North America Inc; WO

A 1997 CAPLUS

(3) Wella Ag; EP 0795313 A 1997 CAPLUS

(4) Yamahatsu Sangyo Kaisha Ltd; EP 0716846 A 1996
CAPLUS